

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 January 2002 (24.01.2002)

PCT

(10) International Publication Number
WO 02/06808 A1

(51) International Patent Classification⁷: **G01N 27/18**

(74) Agents: **KIM, Yong, In et al.**; Yo Sam Building,
15th Floor, 648-23 Yeoksam-dong, Kangnam-ku, Seoul
135-080 (KR).

(21) International Application Number: PCT/KR00/01439

(22) International Filing Date:
12 December 2000 (12.12.2000)

(81) Designated States (*national*): AE, AL, AM, AT, AU, AZ,
BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK,
DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV,
MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO,
RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
US, UZ, VN, YU, ZA, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2000/41374 19 July 2000 (19.07.2000) KR

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **LG
ELECTRONICS INC.** [KR/KR]; 20, Yoido-dong,
Youngdungpo-gu, Seoul 150-010 (KR).

(72) Inventors; and

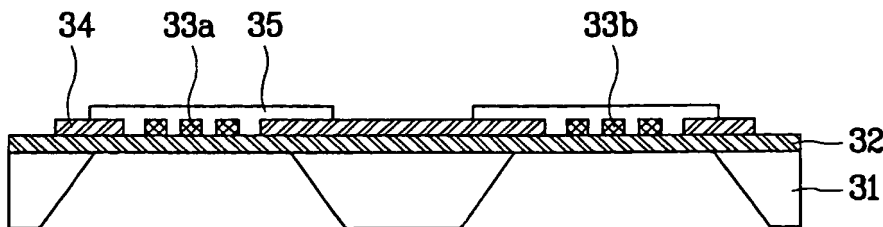
(75) Inventors/Applicants (*for US only*): **LEE, Don, Hee**
[KR/KR]; 1-1109 Samik Apt., 572, Pisan-dong, Ton-
gan-gu, Anyang-shi, Kyonggi-do 431-050 (KR). **HONG,
Hyung, Ki** [KR/KR]; 903-105 Joogong Apt., 41,
Burim-dong, Kwacheon-shi, Kyonggi-do 427-050 (KR).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ABSOLUTE HUMIDITY SENSOR



(57) Abstract: An absolute humidity sensor for a microwave oven is disclosed. The absolute humidity sensor includes a substrate having a first hole and a second hole in a predetermined region, a membrane formed on the substrate, a humidity sensing element formed on the membrane where the first hole is formed, for detecting humidity exposed to the air, having a variable resistance value depending on the detected humidity, and a temperature compensating element formed on the membrane where the second hole is formed, for compensating for the resistance value of the humidity sensing element. For package, the absolute humidity sensor further includes a stem joined with a lower portion of the substrate, having pins for electrically connecting with the outside, and a hole to pass through external humidity, a wire for electrically connecting the electrode pads of the humidity sensing element and the temperature compensating element with the pins of the stem, and a metal shield case formed on an upper portion of the stem to cover an entire surface of the stem including the humidity sensing element and the temperature compensating element.

WO 02/06808 A1